LAB 6

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```
package SEE;
import CIE.Student;
public class External extends Student
{ private int[] externalMarks;
public External(String name, int[] externalMarks)
{
super(name);
this.externalMarks = externalMarks;
this.setMarks(externalMarks);
}
public int[] getExternalMarks()
{
return externalMarks;
}
public void setExternalMarks(int[] externalMarks)
{ this.externalMarks = externalMarks;
this.setMarks(externalMarks); }
 }
```

```
package CIE;
public class Internal extends Student
{
private int[] internalMarks;
public Internal(String name, int[] internalMarks)
{
super(name); this.internalMarks = internalMarks;
this.setMarks(internalMarks);
}
public int[] getInternalMarks()
```

```
{
return internalMarks;
}
public void setInternalMarks(int[] internalMarks)
{
 this.internalMarks = internalMarks;
this.setMarks(internalMarks);
}

}

import CIE.Internal;
import SEE.External;
import java.util.Scanner;
public class Main { public static void main(String[]
args) {
 Scanner sc = new Scanner(System.in);
System.out.print("Enter the number of students: ");
 int n = sc.nextInt();
sc.nextLine();
 Internal[] internalStudents = new Internal[n];
External[] externalStudents = new External[n];
 for (int i = 0; i < n; i++)
{
 System.out.print("Enter the name of student " + (i +
1) + ": ");
String name = sc.nextLine();
System.out.println("Enter internal marks (5 courses)
for " + name + ": ");
int[] internalMarks = new int[5]; for (int j = 0; j <
5; j++)
{
internalMarks[j] = sc.nextInt();
}
```

```
sc.nextLine();
System.out.println("Enter external marks (5 courses)
for " + name + ": ");
int[] externalMarks = new int[5];
for (int j = 0; j < 5; j++)
{
externalMarks[j] = sc.nextInt();
}
 sc.nextLine();
 internalStudents[i] = new Internal(name,
internalMarks);
 externalStudents[i] = new External(name,
externalMarks); }
 System.out.println("\nFinal Marks for all
students:");
for (int i = 0; i < n; i++)
{
int[] internalMarks = internalStudents[i].getMarks();
int[] externalMarks = externalStudents[i].getMarks();
System.out.println("\nStudent: " +
internalStudents[i].getName());
System.out.print("Internal Marks: ");
for (int mark : internalMarks)
{
System.out.print(mark + " "); }
System.out.print("\nExternal Marks: ");
for (int mark : externalMarks)
{
System.out.print(mark + " "); }
System.out.print("\nFinal Marks: ");
for (int j = 0; j < 5; j++)
 {
int finalMark = internalMarks[j] + externalMarks[j];
System.out.print(finalMark + " ");
```

```
 }
System.out.println();
 }
sc.close();
}
}

package CIE;
public class Student {
protected String name;
protected int[] marks;
public Student(String name)
{
this.name = name;
this.marks = new int[5];
 }
 public String getName()
{
return name;
}
public void setMarks(int[] marks)
{
this.marks = marks;
}
 public int[] getMarks() {
return marks;
}
}
```

```
C:\Abhinav 3A\Package>java Main
Enter the number of students: 1
Enter the name of student 1: Abhinav
Enter internal marks (5 courses) for Abhinav:
78
89
98
87
76
Enter external marks (5 courses) for Abhinav:
78
89
87
89
87

Final Marks for all students:

Student: Abhinav
Internal Marks: 78 89 98 87 76
External Marks: 78 89 87 89 87
Final Marks: 156 178 185 176 163
```